

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 through 74 (Cancelled).

75. (Currently Amended) A method for producing a bristle from a thermoplastic polymers ~~polymers~~ polymer by injection molding a molten polymer mass into a bristle molding channel, said channel having a predetermined length and a predetermined cross sectional shape along said length, the method comprising the steps of:

a) injecting the molten polymer mass into said channel under pressure, said pressure being selected in dependence on said cross sectional shape of said channel, a ratio of a largest width of a cross section of said channel to said length of said channel being selected as less than or equal to 1:

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wherein said injection pressure is 2000 to 5000 bar (2×10^5 kPa to 5×10^5 kPa), and sufficient to provide a specific pressure in a bristle forming channel of more than 300 bar (0.3×10^5 kPa); and

b) venting said channel along said length during step a), wherein a shear flow is established with ~~high~~ a core speed of approximately 1000 mm/s in a center of molten polymer mass flow and with a large shearing effect due to wall friction of the molten polymer mass under distinct longitudinal orientation of polymer molecules, at least in a portion of the molten polymer mass proximate a wall of said channel, said longitudinal orientation of the polymer molecules being maintained throughout said length of said channel.

Claims 76-78 (Cancelled).

79. (Previously Presented) The method of claim 75, wherein said injection pressure is set to support crystal seed formation between neighboring longitudinally oriented molecular sections in dependence on said cross sectional shape and said length of said bristle-molding channel.

80. (Previously Presented) The method of claim 75, wherein said bristle-molding channel is cooled.

81. (Previously Presented) The method of claim 75, wherein said bristle-molding channel is vented transverse to a flow direction of the molten polymer mass.

82. (Previously Presented) The method of claim 81, wherein said bristle-molding channel is vented in several planes disposed transverse to a flow direction of the molten polymer mass.

83. (Previously Presented) The method of claim 82, wherein said bristle-molding channel is vented along said length via planes disposed at approximately equal distances.

84. (Previously Presented) The method of claim 75, wherein said bristle-molding channel is vented of air displaced by flow pressure of the molten polymer mass.

85. (Previously Presented) The method of claim 75, wherein said channel is vented with assistance of an external underpressure.

86. (Previously Presented) The method of claim 75, wherein said cross section of said bristle-molding channel remains substantially constant, beginning at an injection side thereof.

87. (Previously Presented) The method of claim 75, wherein said cross section of said bristle-molding channel tapers substantially continuously from an injection side thereof.

88. (Previously Presented) The method of claim 75, wherein the molten polymer mass is injected into an inlet region which narrows like a nozzle towards said bristle-molding channel to produce an extension flow.

89. (Previously Presented) The method of claim 75, wherein said cross sectional shape of said bristle-molding channel has at least one discontinuity configured as a tapering in a flow direction of the molten polymer mass.

90. (Previously Presented) The method of claim 75, wherein said cross section of said bristle-molding channel is selected to have a maximum width of $\leq 3\text{mm}$.

91. (Previously Presented) The method of claim 75, wherein a ratio of a largest width of said channel to said length of said channel is selected to be $\leq 1:250$.

92. (Previously Presented) The method of claim 75, wherein the molten polymer mass is simultaneously injected into several neighboring bristle-molding channels thereby forming a corresponding number of bristles.

93. (Previously Presented) The method of claim 92, wherein, the molten polymer mass is injected into neighboring bristle-molding channels while simultaneously forming a connection between at least two bristles.

94. (Previously Presented) The method of claim 92, wherein, after injection of the bristles, a molten polymer mass of another polymer is subsequently injected, thereby forming a connection between at least two bristles.

95. (Previously Presented) The method of claim 92, wherein the molten polymer mass is injected to form a bristle support which connects at least two or more bristles.

96. (Previously Presented) The method of claim 93, wherein the molten polymer mass is injected to form a bristle support which connects the bristles and forms a brush body.

97. (Previously Presented) The method of claim 95, wherein at least one further molten polymer mass from another polymer is injected onto said bristle support.

98. (Previously Presented) The method of claim 92, wherein a number of bristles are injected with different lengths.

99. (Previously Presented) The method of claim 92, wherein a number of bristles are injected with different cross sections.

100. (Previously Presented) The method of claim 92, wherein a number of bristles are injected with a cross sectional shape which changes along their lengths.

101. (Previously Presented) The method of claim 92, wherein a plurality of bristles are injected with parallel mutual orientation.

102. (Previously Presented) The method of claim 92, wherein at least one part of the bristles is injected in a non-parallel fashion.

103. (Previously Presented) The method of claim 92, wherein bristles of a same geometry but different bending elasticity (hardness) are produced through injection-molding of different molten polymer masses in same molding channels.

104. (Previously Presented) The method of claim 75, wherein the bristles are injected from a polymer or a polymer mixture which has reduced secondary binding forces in a solidified state.

105. (Previously Presented) The method of claim 75, wherein the bristles are injected from a polymer including additives which become active during use.

Claims 106-151 (Cancelled).